FEED SCHEME 3

USER MANUAL

Macro Notice
Feed Scheme *contains Visual Basic code (commonly known as macros) and any computer platform on which it is run must have its* **Macro Security** *setting at* **Medium** *(see Excel menu Tools | Macro | Security | Security Level). When opening* Feed Scheme, *click* **Enable Macros** *at the Security Warning.*

Menu, Procedure and Display Notice
The menus, procedural steps and displays described in this document are derived from **Windows XP Pro SP3** *and the* **Excel** *component of* **Microsoft Office Pro 2003 SP3***. Users should expect to observe differences in these menus, procedures and displays when running Feed Scheme on platforms employing other Microsoft Operating System and/or Office Suite products.*

Overview

Feed Scheme is an off-line feed scheduling database utility designed for use in the broadcast and cable television industry. It tracks virtually all syndicated program and network feeds incoming to a facility from a variety of distributors using numerous delivery systems. *Feed Scheme* offers data import / export functionality and, as a planning tool, is an adjunct to on-line feed scheduling and control systems. Created by a veteran feed coordinator with in the trenches experience handling 300+ weekly feeds (and the frantic game of musical chairs that often accompanies their new season rollouts and eleventh hour refeeds), *Feed Scheme* allows the user to allocate and rearrange often limited dish / receiver / record device resources into an efficient feed event acquisition scheme. In addition to conventional satellite feeds, *Feed Scheme* allows for scheduling of events from sources such as Pathfire® and other catch servers, fixed resource network feeds, production control room feeds – in fact *any* feed that can be found on *any* routing switcher crosspoint.

Feed Scheme runs on the widely available Microsoft® Excel® platform, making it a highly cost effective tool when compared to Enterprise Class scheduling software such as ScheduALL®. *Feed Scheme* can operate virtually anywhere the user has computer access: Home, office, on the road. And because *Feed Scheme* does not tie up on-line scheduler resources, users may run endless what-if scenarios to spot resource conflicts hours, days, weeks, months or years into the future.

Feed Scheme's foundation lies in its *Master Data* input screen where users may enter up to 26 data properties for each individual feed event. Properties include a feed's program title, its duration, first feed date, last feed date, its source dish and receiver, record destination, the primary feed day / time / coordinates, first and second backup feed day / time / coordinates, trouble numbers and more. For users in multi-channel environments, *Feed Scheme* also provides event properties for the broadcast channel on which the feed will be telecast, the day and time of the telecast, the feed's Media ID or House # prefix and more. A variety of cell highlight colors are employed to call a user's attention to data or conditions that might otherwise escape notice (expired last feed dates, selection of back up feeds, excluded primary feed days, faulty restoration of previously excluded primary feed days, missing on-line record orders, important notes and OTO notes). A *Master Data Sort* screen provides users with the ability to filter and sort *Master Data* by any one or multiple numbers of feed event properties. Such

sorts can answer an endless array of questions: *What are all the Monday through Friday feeds at 10 AM* or *what are all the feeds occurring on or after 9/8/2008* or *how many feeds occur on SAT11 / Fixed Dish 4*, to name but a few. *Master Data* and *Master Data Sort* provide data templates that allow a user to input high confidence, no conflict data to on-line feed scheduling applications.

Feed Scheme produces a printable *Daily Feed List* that displays – by ascending time of day – every feed event on a given date. Display dates are user assigned and may look days, weeks, months or years in advance. Displayed events can be filtered to show feeds for all delivery streams in a multi-channel environment or only those feeds for a particular stream – to show all feeds or only those feeds from satellites or only those feeds from a network or only feeds from a catch server, etc. A built in detector evaluates every displayed event for device conflicts and flags each such conflict found. The *Daily Feed List* is used as an adjunct and cross-check for on-line feed scheduling applications.

Feed Time	Feed Source / FD=Fixed Dish# / SD=Steer Dish#	Feed Satellite Coordinates (w/Orbital Slot Degree + D/L Freq & Polarization + L/R Audio) [Dish/Receiver Controller]	Air Time	Media Code	Feed Trouble Number
00:30:00	SAT01 / SD2	Galaxy16 (99°), T18C (4060MHz V 6.2/L 6.8/R) [CompuSat]	M-F 2p	TEMP1	310 369-6116
01:00:00	SAT01 / SD2	Galaxy16 (99°), T18C (4060MHz V 6.2/L 6.8/R) [CompuSat]	M-F 230p	TEMP2	310 369-6116
04:30:00	SAT11 / FD4	Galaxy16 (99°), T06 Srvc 4 (Alteia) (3820MHz V) Digital Ch.4 (GDMX 6/4) [CompuSat]	Sat 1030a	DOTA	818 972-0328
05:00:00	HDNET1	Galaxy25 (97°), Digital 19C (4080MHz V) INET1	M-F 630p	JEOPHD	212 975-4404

I Sources except Pathfire for 9/17/2008 — Backup Feed Coordinates

Feed Scheme's built-in *Satellite-Receiver* database allows the user quick access to answers in the often convoluted allocation of receivers to dishes. Especially for facilities with large antenna farms but

Receiver (29 of 29)	Receiver Model	Source Dish Number	Source Dish S=Steerable F=Fixed	Dish Diameter in Mete	Primary Satellite (Polarit	Signal Band Class	Principal Use	Notes
SAT01	Standard Agile Omni	Dish 2	S	6.1	Various (H,V)	C, Ku Analog	Syndication	Syndicatio
SAT02	Tiernan TDR4022	Dish 2	S	6.1	Various (H,V)	C Digital	Syndication	Syndicatio satellites. bringing d Scopus 29
SAT03	Standard Agile Omni	Dish 3	S	3	Various (H,V)	C Analog	Syndication	Syndicatio 1, 2008. A

without L-band routing, filters in the *Satellite-Receiver* database provide quick answers to questions such as *which digital receiver can see a C Band GDMX signal on Galaxy 16* or *what receivers are allocated to Dish 1* or *how many Standard Agile Omni receivers are in the system and on which dishes are they located*, etc.

Feed Scheme is designed to make resource allocation less painful and more predictable in the fast changing landscape of feed acquisitions. It is an indispensible scheduling tool for feed coordinators.

Minimum System Requirements

- Pentium III CPU, 930MHz
- 512 MB RAM
- 10 MB Default drive free space
- SVGA Display – 32 bit
- 1024 x 768 Screen resolution
- Windows XP/Vista
- Microsoft Office/Excel 2003/2007

Worksheet Protection Defaults

Data Summary – Protected
Master Feed List – Unprotected
Master Feed List Sort – Unprotected
Daily Feed List Sort – Protected
Satellite-Receiver List – Unprotected
User Manual – Protected
Configuration – Protected

Installation

Run the *Feed Scheme* EXE installer file and follow its on screen instructions. The installer will specify a destination folder on the C:\ [root] drive by default – use the *Browse* button to choose or create an alternate directory from which *Feed Scheme* will be used in normal day-to-day operation. *Feed Scheme* must run on an Excel equipped computer or workstation. The directory chosen for the install will become the default location for *Feed Scheme* and its support documents (such as this User Manual file). The *Feed Scheme* installer offers the option to create Desktop and Start Menu icons during installation. It also drops an uninstaller into the Programs folder.

Quick Start Guide

Refer to details elsewhere in this document concerning the following Quick Start steps

1. To **launch** *Feed Scheme*, double click the **Feed Scheme.xls** filename in its Windows Explorer directory or – if any were created during installation – double click a *Feed Scheme* **shortcut icon**.

2. At the Windows Security Warning, select **Enable Macros**. Failure to enable macros will inhibit virtually all of *Feed Scheme's* functionality.

3. At the Windows **Password** login…
   a. Type **fsuser** in the Password field and click **OK** if intended changes to *Feed Scheme* data are to be saved, then answer **NO** the Excel *Read Only* reminder message.
   b. Click **Read Only** at the login if there are no changes intended to *Feed Scheme* data.

4. Review the *Feed Scheme* **Data Summary** page for any highlighted warnings or cautions. The *Data Summary* page displays automatically whenever *Feed Scheme* is opened.

5. Click any one of six **Go to…** buttons to access its associated *Feed Scheme* data tab sheet.

6. First time users may go to the *Configuration* tab and **Load Demo Data** files that will populate all resident data fields to better illustrate *Feed Scheme's* features. *Demo Data* allows new users to become acquainted with *Feed Scheme* and gain hands-on experience with its operation before investing the time and effort to enter their own data. When no further use of *Demo Data* is required, the **Delete All Data** feature on the *Configuration* tab clears all resident data fields in preparation for user data entry.
   a. Warning *Load Demo Data* and *Delete All Data* cause permanent data loss when these features are executed. Users must deliberately permit data deletion by appropriate responses to warning messages. *Load Demo Data* and *Delete All Data* can – and will – delete a user's own data if user data resides in target data fields when either of these two features is executed.

7. Review, filter, sort, enter or revise data on any one or more *Feed Scheme* tab sheets that have been selected. Print these sheets – if required – using Excel print icons, menus or shortcut keys (e.g. Ctrl+P).

8. **Save changes** made to *Feed Scheme* data using Excel save icons, menus or shortcut keys (e.g. Ctrl+S). Changes are saved to *Feed Scheme's* original filename *Feed Scheme.xls*. Whenever a new save occurs, *Feed Scheme* creates a backup of the previous file's contents using the filename *Backup of Feed Scheme.xlk*.

9. **Exit** *Feed Scheme* using Excel menus or the Close X box in Excel's upper right corner or Alt+F4.
   a. Note If no changes were made – and even if *Feed Scheme* was opened in Read Only mode – exiting the database will prompt an Excel message asking if the user wants to save the changes made to *Feed Scheme.xls*. Even in the absence of changes, this save changes message will appear because, when *Feed Scheme* opens, it automatically sets the **Target Date** on the *Daily Feed List Sort* tab to the current system date. Users who have made no changes to *Feed Scheme* simply answer **NO** to the *save changes message* as another new system date will be automatically set for the *Target Date* at the next opening of *Feed Scheme*.

Operational Design, Features and Use

Launch and Macro Security

Feed Scheme launches from the directory to which its installation file was originally extracted. Use either Windows Explorer to click on the filename *Feed Scheme.xls* or – if any shortcuts were created during installation – click a *Feed Scheme* shortcut icon on a Desktop, Start Menu, etc.

Feed Scheme contains Visual Basic code (commonly known as macros) and any computer platform on which it is run must have its Macro Security setting at Medium (see Excel menu Tools | Macro | Security | Security Level). When opening *Feed Scheme*, click Enable Macros at the Security Warning. Failure to enable macros will inhibit virtually all of *Feed Scheme's* functionality.

A deliberate decision was made not to obtain a

digital (or root) certificate for *Feed Scheme*. Though such a certificate would eliminate the need to deal with Macro Security Warnings whenever *Feed Scheme* is opened and would provide a heightened sense of security among users, the certificate has two principal drawbacks: (1) Signing *Feed Scheme* with a root certificate requires the computer on which this utility is run to have an active Internet connection in order to permit Excel to check for any changes in Certificate Revocation Lists (CRLs) whenever *Feed Scheme* is opened – such an on-line connection violates *Feed Scheme*'s off-line functionality, (2) the time, hardware, acquisition and maintenance costs associated with obtaining a root certificate and signing this utility with such a certificate would drive *Feed Scheme*'s purchase price to an unacceptably high figure that might well place the product out of reach for many of its intended users.

For users who wish to maintain a reasonable security posture while running this unsigned utility, a real time antivirus application is recommended with file scanning of xls files enabled at every launch of such documents. Further, users may wish to investigate a Microsoft Office Self-Signed Certificate as a way around the Macro Security Warning when a Medium Security Level is in effect. While a self-signed certificate does not guarantee code authenticity, it may act to alleviate Macro Security Warnings on the specific computers to which "selfcerts" are deployed. For further information on digital certificates, see *Programs | Microsoft Office | Microsoft Office Tools | Digital Certificate for VBA Projects* or study Microsoft Knowledge Base article 820738 (http://support.microsoft.com/kb/820738/).

Password Login

At the Windows **Password** login…
a. Type *fsuser* in the Password field and click *OK* if intended changes to *Feed Scheme* data are to be saved, then answer *NO* the Excel *Read Only* reminder message that follows.
b. Click *Read Only* at the login if there are no changes intended to *Feed Scheme* data.
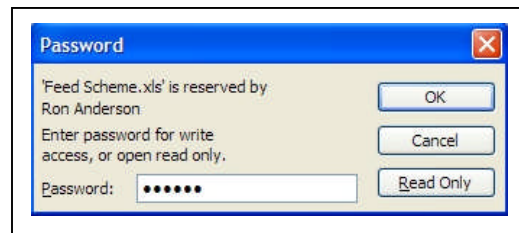
A password is employed on *Feed Scheme* to inhibit the potential for unauthorized users to access and alter the file's data – whether such alterations are accidental or intentional in nature. A second *Read Only* reminder displays immediately following a successful password login as a further caution against careless or uninformed revisions to file data.

Data Summary

The *Data Summary* tab will load and display whenever *Feed Scheme* is opened. This behavior is automatic. Depending upon the tab at which *Feed Scheme* was last saved, the Data Summary display may be briefly proceeded (~1-second or less) by another tab's display.

The purpose of the Data Summary tab is to provide a snapshot overview of data integrity. If any one of nine conditions exist – data is missing, device conflicts are detected, OTO notations are in effect, scheduled primary feed days have been excluded, on-line record orders are yet to be written, special Notes exist for review, new or revised program titles are present, backup feed coordinates reside in the data or defined configuration devices/strings are not present in master feed data – each such condition will be flagged by color highlighting on the Data Summary tab thereby alerting the user to any data mitigation that may be required prior to input of new or revised data. Generally speaking, if the Data Summary tab displays without any color highlighting, then the user's data is good to go.
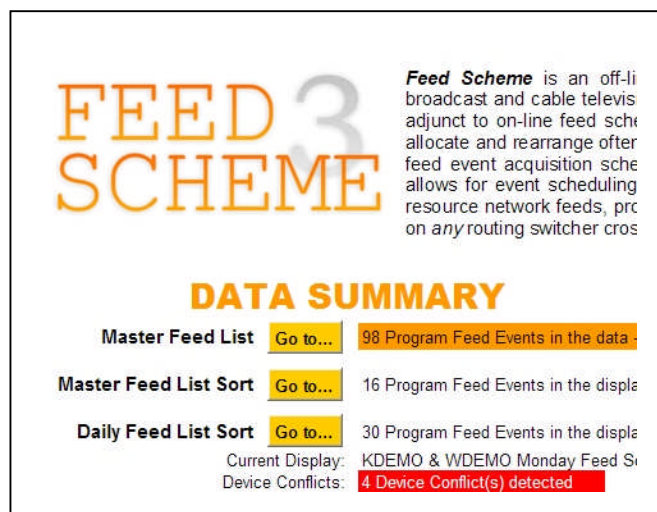
Click any one of the six **Go to…** buttons to access its associated *Feed Scheme* data tab sheet (tabs may also be accessed with the keyboard shortcuts Ctrl+Page Up or Ctrl+Page Down).

Demo Data

First time users may go to the *Configuration* tab and **Load Demo Data** files that will populate all resident fields with snapshot data from 9/18/2008 to better illustrate *Feed Scheme's* features. *Demo Data* allows new users to become acquainted with each *Feed Scheme* tab and gain hands-on experience with its operation under a full data set – and to do so before pouring time and effort into what could otherwise become trial and error entry of their own data. Once a user feels comfortable in their understanding of *Feed Scheme* and no further use of *Demo Data* is required, the **Delete All Data** feature on the *Configuration* tab clears all resident data fields in preparation for a user's entry of their own data. To execute the *Load Demo Data* or *Delete All Data* features of *Feed Scheme*, click the appropriate button on the *Configuration* tab (see **Configuration** below for details).
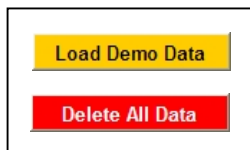
Warning *Load Demo Data* and *Delete All Data* cause permanent data loss when these features are executed. Users must deliberately permit data deletion by appropriate responses to warning messages. *Load Demo Data* and *Delete All Data* can – and will – <u>delete a user's own data</u> if user data resides in target data fields when either of these two features is executed.

Master Feed List

The *Master Feed List* tab (MFL) is the data foundation upon which *Feed Scheme* rests. On this tab, users may enter up to 26 data properties for each individual feed event. Depending upon circumstances, some feeds involve all 26 properties while others may have as few as 18.

There are four components to the MFL tab:

1. The **Header** (A1:Z1) describes each data property column. Cell A1 also contains a feed counter of events in the Active Data Area, a Re-Sort Programs button and, when applicable, will change color and display text alerting users to missing on-line record orders. The MFL window pane is frozen to Row 1 Column A to allow Headers and event Program names to be seen at all times during data entry and scrolling. As long and freeze pane is active, pressing the keys Ctrl+Home from any cell in MFL will cause Excel to place its focus on cell B2.

2. The **Active Data** area (A2:Z176) is the region into which feed properties for all currently active feeds are entered. *Feed events with* **incomplete** *properties must not be entered to the Active Data area as doing so will corrupt filtered results elsewhere in Feed Scheme (see **Pending New Events**, below).* Feed events in the Active Data area can be sorted alphabetically by means of the *Re-Sort Programs* button in cell A1. Conditional highlighting (described in detail below) takes place in the Active Data area. In Excel's named ranges, this area is defined as "Database".

3. The **Obsolete Events** area (A180:Z298) is the region in which expired feed events are stored. When an event in the Active Area expires and its Last Feed Date turns red, a user may either (a) delete the event from the Active Area with no further action taken or (b) move the expired event to Obsolete Events if the user feels the event has potential to be of some future use (see detail on deleting or moving expired events, below). These events can be sorted alphabetically by the *Re-Sort Programs* button in cell A179. Obsolete Events may be quickly accessed by pressing the F5 key and selecting *Obsolete_Events* from the named range *Go To* list. This *Go To* will highlight the title

Obsolete Events and the first 15 rows beneath – from there, a user can scroll to additional rows or columns as required.

4. The **Pending New Events** area (A303:Z502) is the region into which feed properties are entered for new or emerging events but for which all details are not yet fully known. *Feed events with* **incomplete** *properties must not be entered to the Active Data area as doing so will corrupt filtered results elsewhere in Feed Scheme.* Feeds in the Pending Events area are often evaluated by which among them will occur first so, for this reason, these events can be sorted by the *Sort 1ˢᵗ Feed Date* button in cell A302. New season roll-out feeds are placed in the Pending area as their details trickle in over the months, weeks or days prior to first feed. As each new detail on a pending feed is received, it is added to the details on that same feed that had been previously entered. Once all properties for an event have been entered, the feed event is moved from Pending to the MFL Active area. For Quick access to Pending Events, press the F5 key and select *Pending_New_Events* from the named range *Go To* list. This *Go To* will highlight the title *Pending New Events* in cell A300, the Season subtitle in cell A301, the sort button and Event Counter in cell A302 and the next 31 rows beneath – from there, a user can scroll to additional rows or columns as required.

Conditional Highlighting is used on the MFL tab to call attention to 7 data circumstances that may require user attention lest they be overlooked. These conditions will also trigger highlights on the *Data Summary*, *Master Feed List Sort* (MFLS) and *Daily Feed List Sort* (DFLS) tabs. The 7 conditions and the highlights they will produce are as follows:

1. On-Line Record Order Missing – One or more *Record Order Written* entries in column Y are "No".

(a) Cell A1 will turn from yellow to orange and text will display indicating how many On-Line Record Orders have a "No" status in the Active Data area.

(b) The column A program title for each row in which column Y = "No" will change from white to orange.

2. Important Data Present in Notes – The text string "NOTE:" is present in the first 5 character positions in column Z indicating an important (but not critical) note the user wants to stand out. Flag notes are of a temporary nature and meant to be resolved in a relatively short period of time. A flag note is entered in column Z ahead of any less important but often more enduring notes. A flag note entry should end with // (double strokes) to set it apart from any other notes in the same cell that are to survive once the flag note has been resolved and is removed.

The column A program title for each row in which column Z starts with "NOTE:" will change from white to orange.

3. Last Feed Date has Expired – The last feed date in column D has expired. That is, the cell date value is earlier than the computer platform's system date. *Feed Scheme* assumes that users keep accurate system calendars and clocks on their computers. Rows with an expired Last Feed Date flag are eligible for deletion or removal to the Obsolete Events area.

The column D cell for each row in which the Last Feed Date is earlier than the current system calendar date will change from white to red.

4. Default Record Destination New or Changed – The default record destination in column G is either new or has been changed from its previous value. Typically this flag is set for a limited period of days or weeks until all parties concerned with feeds have grown accustomed to the new or changed

destination. This highlight feature is particularly useful in calling attention to new season roll-out feeds that are appearing on the Daily Feed List Sort tab for the first time. To activate this feature add a *[Space]+/+[Space]+N* to the existing 5-character Default Record Destination (e.g. "VR3-1" becomes "VR3-1 / N").

The column G cell for each row in which the Default Record Destination is new or changed will switch from white to purple.

5. Displayed Feed is not Primary Feed – The feed that will display on the Daily Feed List Sort (DFLS) tab is not the Primary feed but, rather, is a backup feed that is either the 1st Refeed or 2nd Refeed.

Feed Scheme makes it easy to quickly assign DFLS a backup feed in place of a primary feed by changing the MFL column H value from a "0" (for Primary) to a value of "1" (for 1st Refeed) or "2" (for 2nd Refeed).

The column H cell for each row in which a 1st or 2nd Refeed is selected will change from white to red.

6. Exclude Primary Feed Day – No feed will display on the Daily Feed List Sort (DFLS) tab for an event row with an otherwise valid feed. To activate this feature add an *x+[Space]* to the head and a *[Space]+x* to the tail of the Primary Feed Day text string (e.g. "M-F" becomes "x M-F x"). The Exclude Primary feature provides a means to deal with feeds that have been canceled on short notice with no same day backup feeds made available. The feature can also be used to run quick what-if tests to illustrate what the DFLS would look like were a particular feed to be excluded from the list of active feeds – without the need to actually remove the feed in question from the active data area.

The column L cell for each row in which the Primary Feed Day has been "Xed-Out" will change from white to red. Additionally, failure to remove the <u>*space*</u> from the head of the Primary Feed Day when clearing Xed-Out days will cause the cell to highlight black. The black highlight will also flag inadvertent leading spaces added during Primary Day data entry.

7. OTO (One Time Only) Data Present in Notes – The text string *OTO+[Space]* is present in the first 4 character positions in column Z indicating an OTO (critical) note the user wants to stand out. OTO notes are of a temporary nature and meant to be resolved in an even shorter period of time than a NOTE: flag. An OTO note is entered in column Z ahead of any less important but often more enduring notes. An OTO note entry should end with // (double strokes) to set it apart from any other notes that are to survive once the flag note has been resolved and is removed.

The column Z Note field for each row in which column Z starts with *OTO+[Space]* will change from white to red.

Input Validation is required in certain columns on the MFL. Invalid time and date entries will produce an input data error message box prompting the user to make the necessary corrections. *Feed Scheme* expects user input to conform to the following formats in these columns:

Duration, *Primary Feed Time*, *1st Refeed Time* and *2nd Refeed Time:*
Hours, minutes and seconds separated by full colons – hh:mm:ss or 01:29:45, 13:00:00, 23:59:45, etc.

First Feed Date, *Last Feed Date:*
Month, day and year separated by slashes – mm/dd/yyyy or 9/7/2008, 10/23/2008, 12/31/2050, etc.

Feed Source (when entering Receivers and Dish Antenna):
5-Character receiver mnemonic* + [Space] + "/" + [Space] + "F" for fixed or "S" for steerable + 2-character dish mnemonic* – SAT01 / SD2, RCV11 / FD4, DSR20 / S0A, ASR03 / FC1, etc.
One character of each Feed Source mnemonic must be a letter from A to Z

Delete and **Move Events** on the MFL tab using the following recommended procedural steps:

Delete:

1. **Highlight** columns A through Z on row(s) to delete

2. Press **Delete** key

3. Click **Re-Sort Programs** button in cell A1 or A179 or **Sort 1ˢᵗ Feed Date** button in cell A302

Copy:

1. **Highlight** columns A through Z on source row(s) to copy

2. Press **Ctrl+C** keys to copy source row(s)

3. Scroll to and select **Column A** cell at top left of the destination row(s) range

4. Press key sequence **Alt,e,s,v** (Edit menu, Paste Special, Values) to paste copied source row(s) to destination row(s) – [Paste Special *Values* preserves formatting in the destination row(s)]

5. Click **Re-Sort Programs** button in cell A1 or A179 or **Sort 1ˢᵗ Feed Date** button in cell A302

Move:

1. **Highlight** columns A through Z on source row(s) to move

2. Press **Ctrl+C** keys to copy source row(s)

3. Scroll to and select **Column A** cell at top left of the destination row(s) range

4. Press key sequence **Alt,e,s,v** (Edit menu, Paste Special, Values) to paste copied source row(s) to destination row(s) – [Pasting ***values*** preserves formatting in the destination row(s)]

5. Scroll to same row(s) from Step 1 and **Re-Highlight** columns A through Z on source row(s)

6. Press **Delete** key

7. Click **Re-Sort Programs** button in cell A1 or A179 or **Sort 1ˢᵗ Feed Date** button in cell A302

Garbage-In, Garbage-Out rules apply on the MFL tab. Because it is the data foundation upon which *Feed Scheme* rests, unintended data entry errors, omissions, typos, deletions, etc that are committed on MFL will be passed downstream to all other tabs and thereby compromise data integrity.

Master Feed List Sort

The *Master Feed List Sort* tab (MFLS) duplicates data found on the MLS tab with the difference that Excel's AutoFilter feature is enabled on each MFLS column to permit virtually unlimited data filtering and sorting. Independent of MFLS data displays, all original data on the MFL tab remains unaltered, free from risk of loss or contamination and fully available to other tabs (such as Daily Feed List Sort) for other purposes.


On MFLS, users may filter and sort data by any one or multiple numbers of feed event properties. Such sorts can answer an endless array of questions: *What are all the Monday through Friday feeds at 10 AM* or *What are all*

the feeds occurring on or after 9/8/2008 or *How many feeds occur on SAT11 / Fixed Dish 4*, to name but a few. The following filter/sort examples illustrate use of MFLS and AutoFilter with *Demo* file data:

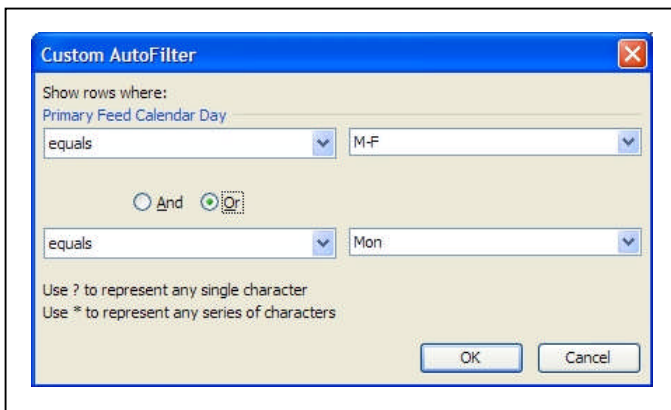*What are all the Monday through Friday feeds at 10 AM?*

1. Click the **Re-Set Programs** button in cell A1 to show all data

2. Click the **AutoFilter** drop down button in the bottom right corner of the *Primary Feed Calendar Day*

column then highlight and click **Custom** in the options list
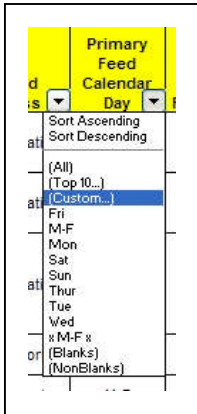
3. In the **Custom AutoFilter** dialogue box, click the drop down button in the **upper left field** and

select *equals* from the options list (*equals* is typically the default option and may already be displayed)
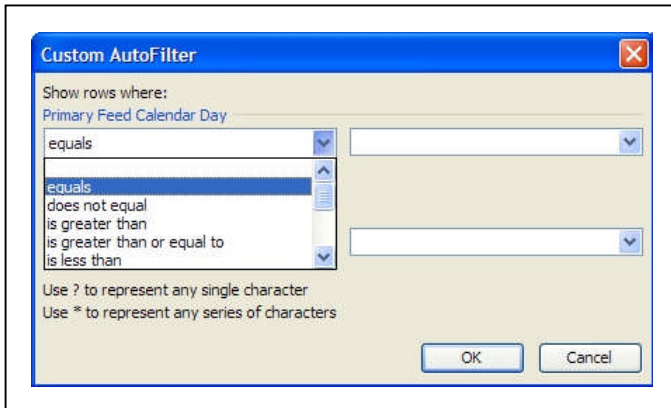
4. Click the drop down button in the **upper right field** and select *M-F* from the options list

5. Select the **Or** button option

6. Repeat steps 3 and 4 for the **lower left** and **lower right** fields except select *Mon* from the options list then click the **OK** button

7. Click the **AutoFilter** drop down button in the bottom right corner of the *Primary Feed Time* column then highlight and click **10:00:00** in the options list to display all Monday through Friday feeds at 10 AM

What are all the Promo Feeds sorted by Primary Feed Time?

1. Click the **Re-Set Programs** button in cell A1 to show all data

2. Click the **AutoFilter** drop down button in the bottom right corner of the *Program* column then highlight and click **Custom** in the options list

3. In the **Custom AutoFilter** dialogue box, click the drop down button in the **upper left field** and select *contains* from the options list
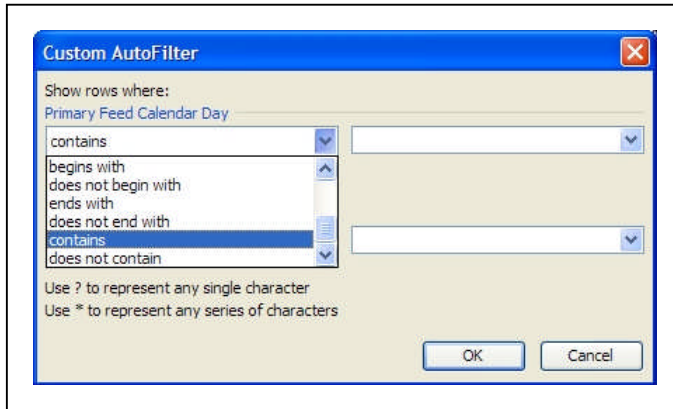
4. In the **upper right field** type *promo* then click the **OK** button
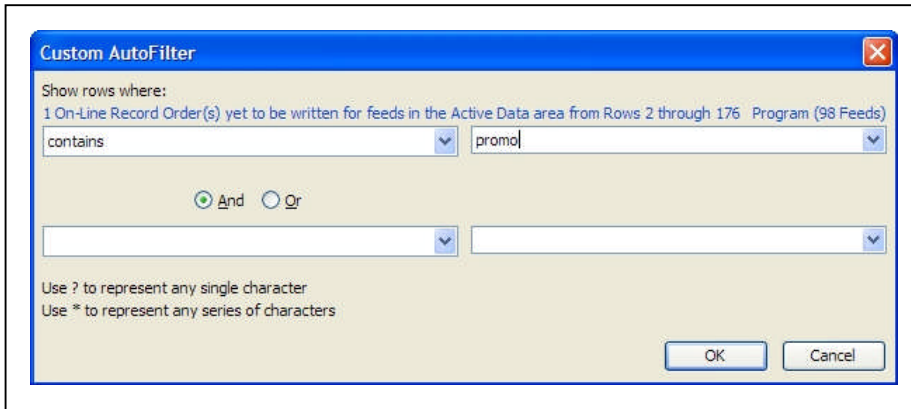

5. Click the **AutoFilter** drop down button in the bottom right corner of the *Primary Feed Time* column then highlight and click **Sort Ascending** in the options list to display all feed events with "promo" in their title sorted by ascending Primary Feed Time
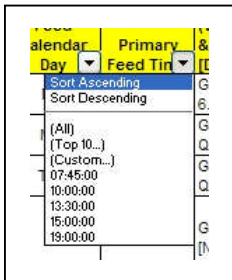
Conditional Highlighting employed on the MFLS tab is identical to that used on the MFL tab and calls attention to 7 data circumstances that may require user attention lest they be overlooked. For details, refer to highlighting described for the MFL tab.

Counters are incorporated on two Header cells on the MFLS tab. The *Duration* header in B1 contains a counter to total the duration of all events visible in the current data filter while the *Feeds Per Week* header in J1 contains a counter to total the number of weekly feeds in all visible filtered events.
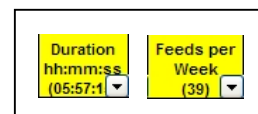
A **Sort Zero Index** resides in MFLS column AA. This column operates behind the scenes and its contents are not to be disturbed or altered in any way lest functionality of the *Re-Sort Programs* button be inhibited.

Daily Feed List Sort

The *Daily Feed List Sort* tab (DFLS) is the primary display of feed data laid out in an ascending time of day and one day at a time format. It is the tab on which what-if scenarios are run and conflict detection occurs. DFLS also produces a Daily Feed List printout. Days and dates on this tab can be user assigned and may look days, weeks, months or years into the future or backward into the past. Displayed events can be filtered to show feeds for all delivery streams in a multi-channel environment or only those feeds for a particular stream – to

show all feeds or only those feeds from satellites or only those feeds from a network or only feeds from a catch server, etc. DFLS contains three hidden columns (C, D and M) whose contents are used for filter and sort procedures but are not made available for display.

There are four components to the DFLS tab:

1. The **Data Filters** (H1:K5) accept input of user criteria that will determine what existing events in the

MFL *Active Data* area will be presented in the DFLS *Event Display*. User criteria are entered via three drop down lists (*#1*, *#2* and *#3*) and one *Target Date* field. Clicking the *#4 Sort Data* button sends results to the *Event Display* where feed events that match the selected criteria can be observed, analyzed and any conflicts noted. Detail on the criteria options:

Select Airs On (#1) sets filter criteria to either one or all of the two supported delivery streams (or channels). Criteria options in this list are defined on the Configuration tab (see **Configuration** below). To view the list and select an option, click cell H2 to display the drop down button and the *Select "Airs*

On" Data message. Click the drop down button at the right edge of the cell to display the options list then highlight and click on the desired criteria from the list to insert it in H2. Once an *Airs On* criteria option is present in cell H2 it will remain in effect indefinitely until it is changed by the user.

Select Feed Day (#2) sets filter criteria for each day of the week or all days at once. Criteria options in this list are fixed and not user definable on the Configuration tab. To view the list and select an option, click cell I2 to display the drop down button and the *Select "Feed Day" Data* message. Click the drop down button

at the right edge of the cell to display the options list then highlight and click on the desired criteria from the list to insert it in I2. Once a *Feed Day* criteria option is present in cell I2 it will remain in effect indefinitely until it is changed by the user.
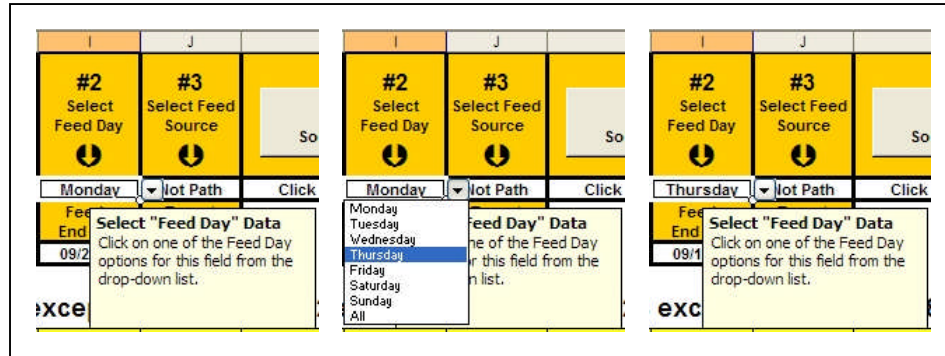
Select Feed Source (#3) sets filter criteria to one of seven supported feed source options. Items in this list are defined on the Configuration tab (see ***Configuration*** below). To view the list and select an option, click cell J2 to display the drop down button and the *Select "Feed Source" Data* message. Click the drop down button at the right edge of the cell to display the options list then highlight and click on the desired criteria from

the list to insert it in J2. Once a *Feed Source* criteria option is present in cell J2 it will remain in effect indefinitely until it is changed by the user.
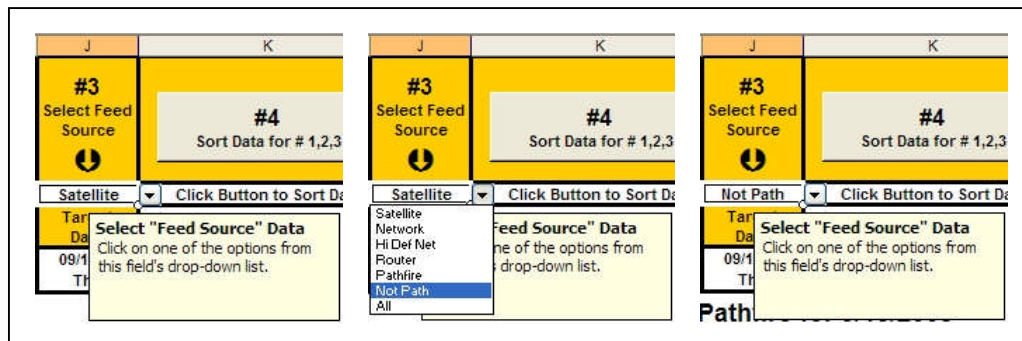
Target Date sets filter criteria to a given date that acts in conjunction with the *Feed Day* criteria. The

Target Date allows a user to run what-if scenarios far into the future or backward into the past. The numeric value for this criterion is determined in one of two ways. First, each time *Feed Scheme* is opened, the current system date is automatically entered into cell J5 – to assure accuracy of this value, regular periodic synchronization of a computer with a time server is recommended. Second, a user may override the system date in J5 by editing the cell to define a target date other than the current system date – this date may be days, weeks, months or years before or after the system date. *Input Validation* is enabled on cell J5 causing invalid date entries to produce an input data error message prompting a user to make the necessary corrections before proceeding. To enter a user defined *Target Date*, highlight cell J5 and type the desired date using mm/dd/yyyy format. Once a *Target Date* is present in cell J5 it will remain in effect until it is changed by the user or until *Feed Scheme* is closed and reopened. Directly beneath the *Target Date* numeric field, cell J6 displays an abbreviation of the target's day of the week. The interrelationship between *Target Date* and *Feed Day* is as follows: A feed day's ***date*** shall be the first occurrence of that ***day*** on or after the ***target date***. For example, if the feed day is *Thursday* and the target date is *09/16/2008*, then the feed day shall be defined as *Thursday 09/18/2008* because that is the first Thursday to occur on or after 09/16/2008.
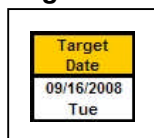
Feeds Begin and ***Feeds End*** values contained in cells H5 and I5 are calculated dates that derive

from the *Feed Day* and *Target Date*. They are passed as criteria to the filter engine. These values are not typically accessible by the user and no attempt should be made to edit the content of these cells.
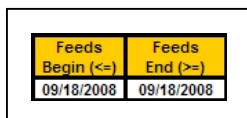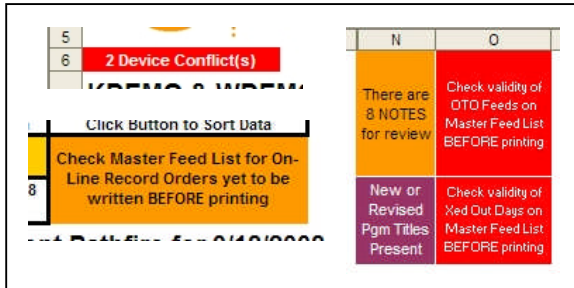
Sort Data for # 1,2,3 (#4) in cell K1 is the control button that activates the filter engine and sorts MFL *Active Data* events for only those that meet the criteria defined by the Data Filters. Events satisfying the criteria are displayed in the DFLS *Event Display* in ascending order by *Feed Time*. It is important to note that each change – or group of changes – to data filter criteria requires a subsequent click on *#4 Sort Data* in order for the change(s) to be observed in the *Event Display*.
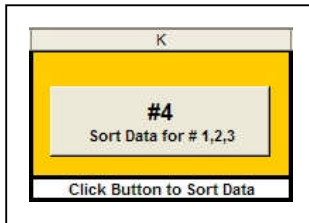
The next component on the DFLS tab:

2. ***Warning Cells*** or ***Clusters*** (A6, K3 and N1:O2) call attention to conditions that require user intervention or merit scrutiny on the MFL tab. Each warning is highlighted in keeping with the same color scheme used on the DS, MFL and MFLS tabs. Each highlight is accompanied by text describing the condition that triggered the warning. The user must make a determination as to the severity of each warning, its point of origin and whether or not immediate corrective action is required to affect a solution. Some warnings (e.g. Device Conflicts, OTO Feeds, Xed Out Days) demand a prompt solution while others (e.g. Notes for Review, On Line Record Orders to be Written, etc) may require nothing more than the user's casual acknowledgement for the time being. In general, if no warning cells or clusters are visible on the DFLS tab, then data in the *Event Display* is considered to be reliable and ready for use.

3. An ***Event Display*** (A7:K184) presents the list of MFL Active feeds – sorted by ascending *Feed Time* – that meet the criteria selected in the *Data Filters*. A one line text summary in Row 7 describes, in plain language, the criteria selected while a Backup Feed flag notes the presence of events that are not Primary feeds. Counters in cell A8 and B8 total the number of feeds in the display and the cumulative total duration of those feeds, respectively. When DFLS is printed, it is the *Event Display* that is sent to the printer.

Conditional Highlighting used in the *Event Display* calls attention to the following 6 data conditions:

Backup Feed is Present – DFLS columns H:K highlights black when the row's feed event is a backup. All other highlights for the same columns are overridden. The highlight condition is met when MFL column H data is a value other than 0. In addition, a black *Backup Feed* flag appears in cell O7.

Primary Distribution Channel – The row is white when a feed event airs on the Primary Channel.

Secondary Distribution Channel – The row is light gray when a feed event airs on the Secondary Channel.

All Distribution Channels – Columns B:O are light blue and the text is italicized when a row's feed event airs on All Channels.

Device Conflict Present – Column A highlights red when a device conflict is detected in a row. All other highlights for the column are overridden. In addition, a red *Device Conflict(s)* flag appears in cell A6.

Default Record Destination New or Changed – DFLS Column A highlights purple when a row's feed event involves a new or changed record destination. In addition, a purple *New or Revised Pgm Title* flag appears in cell A184. The highlight condition is met when MFL column G ends in " / N".

The final component on the DFLS tab:

4. A **Conflict Detector** (AH4:CR183) flags device conflicts between dish antenna, receivers and destination record ports. The Conflict Detector may be quickly accessed by pressing the F5 key and selecting *Conflict_Detector* from the named range *Go To* list. This *Go To* will highlight cells AE1:AV8 on the DFLS tab – from there, a user can scroll to additional rows or columns as required. Devices labeled in rows 4 and 8 of the Conflict Detector are defined on the Configuration tab (see **Configuration** below). If, for any reason, a row 4 value does not match its mirror value in row 8, the row 4 value will highlight in red and corrective action must be undertaken at row 8 to correct the fault.

	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	Day Text to Number *Do Not Disturb*	H5 Serial Value *Do Not Disturb*		**Conflict Detector**											
2	5	39744.00	*Disable Conflict Detection [CD] on <u>fixed</u> Dish Antenna with <u>multiple</u> Receivers to inhibit false positives.*												
3			*AH4:CR4 values that do not match their AH8:CR8 values will highlight in RED*												
4		Device Code >		D1	D1	D1	D2	D2	D2	D3	D3	D3	D4	D4	D4
5		Begin/End and CD >		Begin	End	Disable CD	Begin	End	Enable CD	Begin	End	Enable CD	Begin	End	Disable CD
6		Device Integer >			1			2			3			4	
7	New/Rev SubTotal 2	CD SubTotal 2	Devices In Use Matrix and Conflict Detector [CD] - Do NOT Disturb												
8				D1	D1	D1	D2	D2	D2	D3	D3	D3	D4	D4	D4
10	0	0					2.02083	2.04149							
13	0	0					2.04167	2.06233							
25	1	0													
28	0	0													
29	1	1					2.25000	2.27066							
30	0	1													

With two notable exceptions, the detector typically operates behind the scenes and is not visible to a user. The two exceptions – *Conflict Verification* and *False Positive Mitigation* – are described as follows:

Conflict Verification may be required when a user cannot precisely determine which devices are in conflict by observing the *Event Display* itself, or when a user wants to verify the validity of a conclusion reached regarding devices in conflict. In such circumstances, a user may refer to the Detector and observe its findings as follows: Access the Conflict Detector using the named range *Go To* list as described above. Column AF totals the number of conflicts detected on a given row – when the total is greater than 0, the cell highlights black. A black highlighted cell in column AF correlates with the red highlighted cell in column A of the *Event Display* for the same row.

To determine the device involved on a given conflict row, scroll across the row between columns AH:CR and find the cell highlighted black that contains the text "DC#" then refer to the column header in

19.25000	19.27066	DC3

row 4 to identify the device. Because conflicts are time dependent events involving two or more devices, at least one other nearby row will also contain a black highlighted DC# cell. The black highlighted DC# cells identify all the devices involved in the conflict. The number values in a DC# cell (e.g. DC3, DC4, etc) are diagnostic in nature and may be disregarded for purposes of this discussion. Conflicts are resolved by accessing the MFL tab and revising conflicting device data for at least one of the feed events involved.

False Positive Mitigation is required when device allocations in a user facility are such that they trigger false positives in the Conflict Detector's algorithm. A false positive can occur when a facility employs multiple receivers on a single fixed dish. *Feed Scheme* treats receivers and dishes as a single data field (e.g. SAT01 / SD2) on the MFL tab but evaluates each separately in the DFLS conflict detector. Because fixed dishes are static resources and do not routinely change satellites, the most straightforward solution to a false positive is to disable conflict detection on those fixed dishes that trigger false positives. To do this, access the Conflict Detector using the named range *Go To* list as described above. Find the device code in row 4 of the dish to be disabled. Highlight the 3rd column in

row 5 of the selected device to display a drop down button and the *Select CD Mode* message. Click the drop down button at the right edge of the cell to display the options list then highlight and click on *Disable CD* from the list to insert it in the cell. Disable CD cells highlight black. Once a *Disable CD* option is present for a device, it will remain in effect indefinitely until it is changed by the user and conflict detection for the device will be disabled from that moment forward. The option to disable conflict detection is available for all devices in the Conflict Detector. CD Enable/Disable settings must be entered manually at all times – they *are not retained* in data or configuration backup files.

DFLS Printouts are produced by means of the *Print* icon in Excel's menu bar or via the shortcut keys *Ctrl+P*. The Print icon will direct a printout to whatever printer is the system's current Default Printer. The Ctrl+P keys will allow a user to select a printer from among all available printers on the system. DFLS printouts are often distributed on a daily basis to operating personnel as a feed schedule in lieu of – or in addition to – any such printouts as may also be available from a facility's online scheduler.

Satellite-Receiver List

The *Satellite-Receiver List* (SRL) is a built-in database to store device details that can be used to quickly access and display information regarding the often convoluted allocation of receivers to dishes. This tab can answer questions such as *which digital receiver can see a C Band GDMX signal on Galaxy 16* or *what receivers are allocated to Dish 1* or *how many Standard Agile Omni receivers are in the system and on which dishes are they located*, etc. SRL data is independent of MFL data and the two do not directly interact. Users should think of SRL as a reference tab containing information that may be beneficial when contemplating additions or revisions to MFL data.

	A	B	C	D	E	F	G	H	I
1 2	Satellite Dish and Receiver Configuration List						Show All Devices		
3	Receiver (29 of 29)	Receiver Model	Source Dish Number	Source Dish S=Steerable F=Fixed	Dish Diameter in Mete	Primary Satellite (Polarit	Signal Band Class	Principal Use	Notes
4	SAT01	Standard Agile Omni	Dish 2	S	6.1	Various (H,V)	C, Ku Analog	Syndication	Syndication C and Ku Band feeds on
5	SAT02	Tiernan TDR4022	Dish 2	S	6.1	Various (H,V)	C Digital	Syndication	Syndication C Band GDMX and other satellites. Among other feed types, t bringing down all the same feeds as a Scopus 2980 (MCPC as used on PM service as of August 1, 2008 due to a
6	SAT03	Standard Agile Omni	Dish 3	S	3	Various (H,V)	C Analog	Syndication	Syndication C Band feeds. [*Dish an 1, 2008. Awaiting rebuild.]
7	SAT04	Scientific Atlanta Power VU	Dish 9	F	3	AMC 3 (H,V)	Ku Digital	News	Pathfire and CNN Primary feeds.
8	SAT05	Scopus IRD 2980C	Dish 5	F	4.5	Galaxy 25 (H,V)	C Digital	Syndication	Syndication Digital NET feeds on CW Insider).
9	SAT06	Scopus IRD 2600	Dish 1	F	7.3	Galaxy 28 (H,V)	C Digital	Network	Digital Network feeds.
10	SAT07	Server	Dish 1	F	7.3	Galaxy 28 (H,V)	- - -	News	NET Newspath feeds.
11	SAT08	Standard Omni 422CI	Dish 8	S	4.2	Various (H,V)	Ku Digital	News	Digital News feeds on AMC 5, Galaxy
12	SAT09	Unity 4422	Dish 7	F	3	AMC 5 (H,V)	Ku Digital	News	CNN Newsbeam.

A *Show All Devices* button quickly removes any active filter settings employed on SRL and displays data on all existing devices.

A counter in cell A3 keeps track of the number of Receivers displayed vs. the total number of receivers present in all existing data.

Data rows 4 to 50 in *Show All* mode are highlighted in alternating white and light gray. When data is filtered, however, white and gray highlights may no longer be alternating.

Like the MFLS tab, Excel's AutoFilter is enabled on SRL and functions in the same manner. The following filter/sort examples illustrate use of SRL and AutoFilter with *Demo* file data:
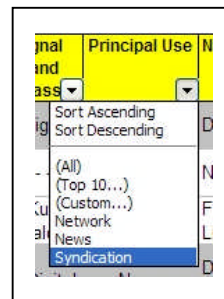
Which receivers allocated to Dish 1 are used for syndication?

1. Click the **Show All Devices** button in merged cell A1 to show all data

2. Click the **AutoFilter** drop down button in the bottom right corner of the *Source Dish Number* column then highlight and click **Dish 1** in the options list
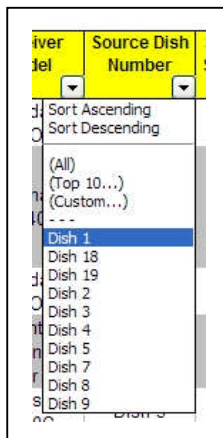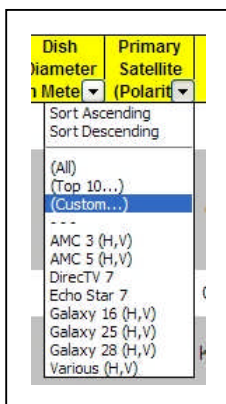
3. Click the **AutoFilter** drop down button in the bottom right corner of the *Principal Use* column then highlight and click **Syndication** in the options list to display all Dish 1 Receivers used for syndication

Which receivers can access a GDMX signal on Galaxy 16?

1. Click the **Show All Devices** button in merged cell A1 to show all data

2. Click the **AutoFilter** drop down button in the bottom right corner of the *Primary Satellite* column then highlight and click **Custom** in the options list
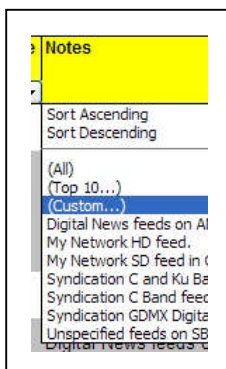
3. In the **Custom AutoFilter** dialogue box, click the drop down button in the **upper left field** and select *contains* from the options list then click the drop down button in the **upper right field** and select *Various (H,V)* from the options list
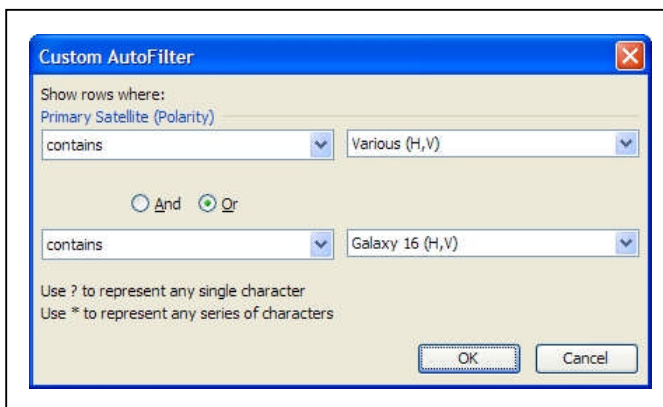
4. Select the **Or** button option

5. Repeat step 3 for the **lower left** and **lower right** fields except select *Galaxy 16 (H, V)* from the lower right options list then click the **OK** button

6. Click the **AutoFilter** drop down button in the bottom right corner of the *Notes* column then highlight and click **Custom** in the options list

7. In the **Custom AutoFilter** dialogue box, click the drop down button in the **upper left field** and select *contains* from the options list then in the **upper right field** type *GDMX* and click the OK button to show all receivers capable of receiving a GDMX signal on Galaxy 16
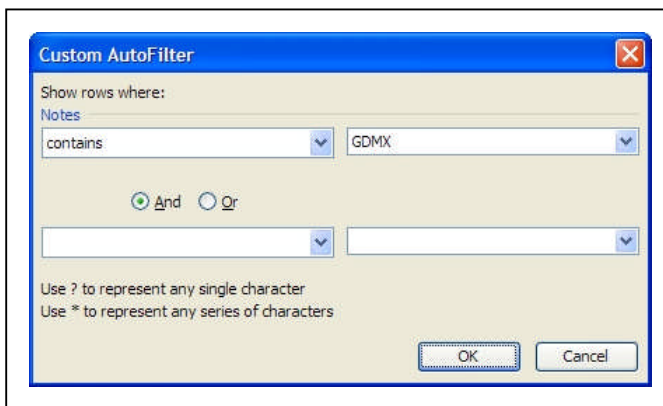
User Manual

The *User Manual* tab contains a hyperlink (cell A7) to the directory in which the *Feed Scheme User Manual* and *Feed Scheme Quick Start* PDF files will typically reside. The hyperlink assumes the User Manual and Quick Start files were saved to the same directory to which *Feed Scheme.xls* was saved and from which it is currently running. If that is not the case, the browser opened by the hyperlink is used to navigate to the location where the PDF files were saved. The user is required to select and open the appropriate file from the browser window. A hyperlink to an Adobe Reader download site is also provided on this tab.

Configuration

The *Configuration* tab provides users with the ability to customize *Feed Scheme* to an individual facility. Definitions entered into the boxed data cells on this tab are used throughout *Feed Scheme* in a multiplicity of ways. So it is important that there be absolute consistency between data entered on this tab and corresponding data entered on the MFL tab to, for example, avoid corrupt data filter results. Obviously, it does no good to define a receiver as *SAT12* on the *Configuration* tab while defining the same receiver as *RCV12* on the MFL tab. Yellow highlighting employed on the *Configuration* tab alerts users to defined devices or character strings that are not currently reflected in MFL data. Such highlighting does not, by itself, guarantee that data corruption *does* exist but merely suggests the possibility that corruption *could* exist – thus providing the user with an opportunity to further investigate the underlying conditions. The highlighting may also pinpoint under utilized devices.

Input Validation is required in 23 of the 37 data box fields on the *Configuration* tab. These fields are flagged with header text stating *Enter between…* or *Enter exactly…* and failure to observe the required data entry format will produce an input data error message box prompting the user to make the necessary corrections. *Feed Scheme* expects user input to conform to the following formats in these fields:

Antennas:
2-Character mnemonic – D2, 0A, C1, etc.

Receivers/Sources and *Recorders/Destinations*:
5-Character receiver mnemonic – SAT01, RCV1A, DSRA2, ASR03, etc.
5-Character recorder mnemonic – VR3-1, SVR4A, DVR12, TAPE2, etc.

Naming Conventions employed on the *Configuration* tab's *Antennas*, *Receivers/Sources* and *Recorders/Destinations* input fields should, when possible, duplicate mnemonics used in a facility's existing routing switcher and other device addressable equipment. When duplication is not possible, approximation will usually suffice. The *Select Feed Source Options* input fields pass data to the Cell J2 list names and Advanced Filter used on the DFLS tab. Failure to correctly construct the Filter String criteria in Column L will have adverse effects on the functional ability of DFLS. Whatever naming conventions are ultimately used on the *Configuration* tab, they must adhere to *Feed Scheme's* input validation rules. It is highly recommended that users load *Feed Scheme's* Demo Data files to

observe the interrelationships between naming conventions used on the *Configuration* tab and data on other tabs.

Data Import/Export and **Deletion** is also provided on the *Configuration* tab. These processes are global in nature – meaning *all* data is imported or exported or *all* data is deleted – and selective treatment of limited portions of the data is not supported.


Users may run global import, export and delete data processes with, of course, the customary understanding that if the task is performed prematurely and/or incorrectly, irrevocable data loss can result. To this end, a sequence of warning messages accompany all import/export and delete procedures, each one of which is described below.

The **Load Demo Data** button allows users to load demo files containing data to illustrate *Feed Scheme* features. Demo files are deliberately constructed to trigger every warning highlight built into every tab in *Feed Scheme*. They portray the interrelationships between data entered on MFL and other tabs and allow users to experiment with data entry, filtering, sorting and configuration settings while they run their own what-if simulations to illustrate the consequences of their actions. Provided a user's permanent data is backed up beforehand for safekeeping and later retrieval (see **Export Backup Data** and **Load Backup Data**), demo files can be reloaded at anytime a user desires to further study or refresh one's knowledge of *Feed Scheme* features.

During *Feed Scheme* installation, these demo files are typically extracted to the directory from which *Feed Scheme.xls* runs. If, for any reason, a user chooses to locate these demo files in a directory other than that from which the *Feed Scheme.xls* file runs, it will be necessary to navigate to the directory containing the demo files in order to load them.

The following message boxes are displayed to guide the user through the demo file load process (the screen shot samples illustrate demo loading through file #1 – similar messages appear for demo files #2 and #3).

If data already resides in *Feed Scheme*, the user is asked to OK the deletion of data that will occur during the demo load. (If NO is selected, a message will display confirming the demo load process abort.)
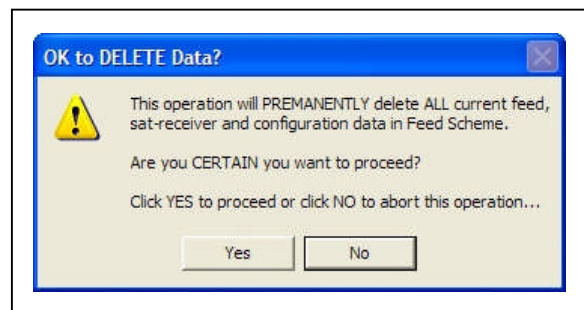
If YES is selected in the previous message, the user is given the filename of the #1 Demo file to seek in the browser window that follows.

When OK is selected in the previous message, the user locates and selects the #1 Demo Data file name from the browser window and clicks Open. If demo files were saved to another directory than the one presented in the browser, the browser is used to navigate to that directory.
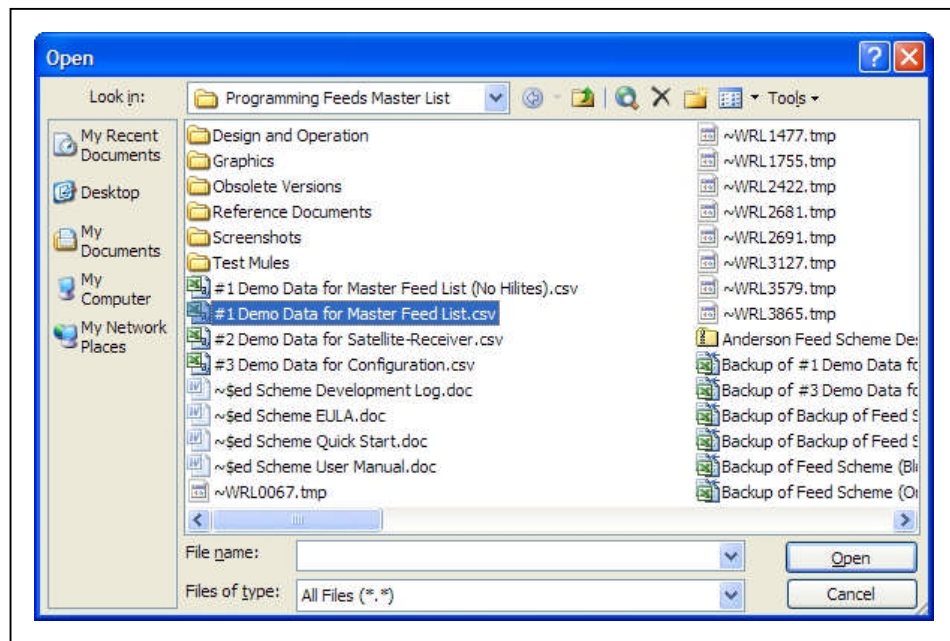
When Open is clicked in the browser, a confirmation message displays containing the user's filename selection and its path.
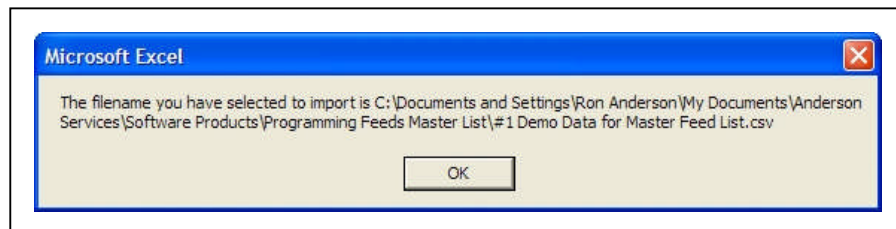
When OK is clicked in the previous message, the #1 Demo Data file loads and a load confirmation message appears that also gives the user the filename of the #2 Demo file to seek in the next browser window. (Similar messages and browser windows appear for the #2 and #3 Demo files.)
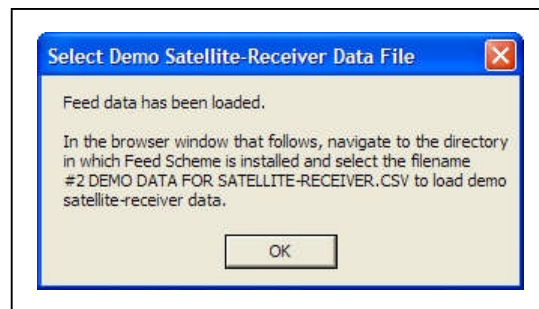
Once all three Demo Data files have loaded, a load complete message displays. When the OK button is clicked, DFLS and MFLS are updated, a message about disabling certain Conflict Detection settings when using demo files appears, then the Data Summary tab is displayed and the user may begin to investigate *Feed Scheme* features.
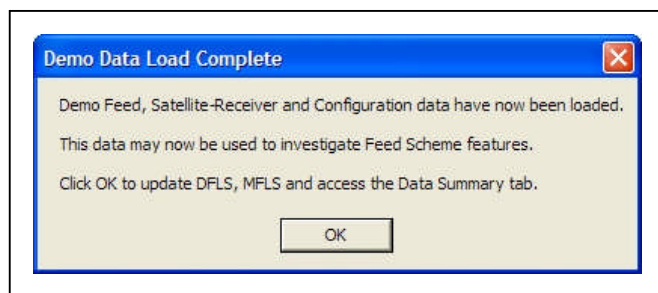
The **Export Backup Data** button allows users to save existing Master Feed List, Satellite-Receiver List and Configuration data to backup files for safekeeping. This process is global in nature – meaning *all* current data is exported – and selective treatment of limited portions of the data is not supported. Five backup files are created in the C:\ [Root] directory under the filenames *FSActiveData.csv*, *FSConfigData.csv*, *FSObsoleteData.csv*, *FSPendingData.csv* and *FSSatRcvrData.csv*. These filenames and their C:\[Root] path are embedded in *Feed Scheme's* code and must not be altered.

The following message boxes are displayed during the backup export process.

If *Feed Scheme* back up files already reside on the system, the user is asked to OK the overwrite of existing export files. (If NO is selected, a message will display confirming the export process abort.)

OK to OVERWRITE Export Files?

⚠ One or more Export files already exist and will be overwritten.

Are you CERTAIN you want to overwrite the existing files?

Click YES to proceed or click NO to abort this operation…

[Yes] [No]

If YES is selected in the previous message, a Data Export Complete message appears when the backup process has concluded. Depending upon the quantity of data involved and system speed, it may take several seconds for this message to appear.

Data Export Complete

All current Master Feed, Satellite-Receiver and Configuration data has been exported to backup files in the C:\root directory.

[OK]

The **Load Backup Data** button allows users to load backup files created by the *Export Backup Data* feature. This process is global in nature – meaning *all* backup data is imported – and selective treatment of limited portions of the data is not supported. The five backup files are located in the C:\ [Root] directory under the filenames *FSActiveData.csv*, *FSConfigData.csv, FSObsoleteData.csv*, *FSPendingData.csv* and *FSSatRcvrData.csv*. These filenames and their C:\[Root] path are embedded in *Feed Scheme's* code and must not be altered.

The following message boxes are displayed during the load backup data process.

If data already resides in *Feed Scheme*, the user is asked to OK the deletion of data that will occur during the backup load. (If NO is selected, a message will display confirming the backup load process abort.)
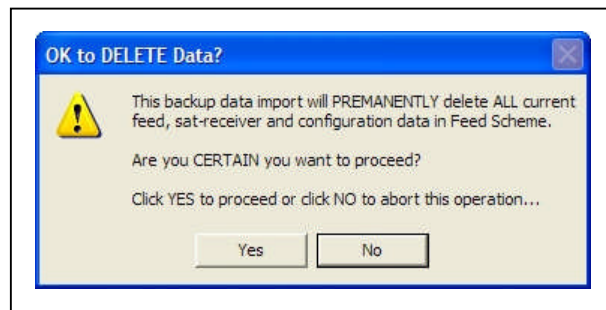
OK to DELETE Data?

⚠ This backup data import will PREMANENTLY delete ALL current feed, sat-receiver and configuration data in Feed Scheme.

Are you CERTAIN you want to proceed?

Click YES to proceed or click NO to abort this operation…

[Yes] [No]

If YES is selected in the previous message, the user is given a second chance to abort the import process. (If CANCEL is selected, a message will display confirming the backup load process abort.)

OK to IMPORT Data?

⚠ Click OK to begin backup data import or click Cancel to abort…

[OK] [Cancel]
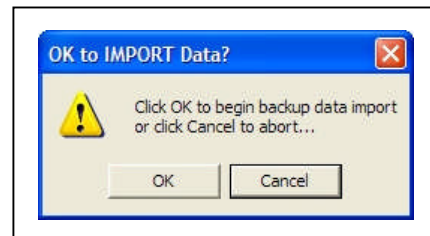
When OK is selected in the previous message and all five Backup Data files are loaded, an import complete message displays. When the OK button is clicked, DFLS and MFLS are updated then the Data Summary tab is displayed and the user may begin to utilize *Feed Scheme*.

Data Import Complete

Feed, Satellite-Receiver and Configuration data from backup files has now been imported.

Click OK to update DFLS, MFLS and access the Data Summary tab.

[OK]
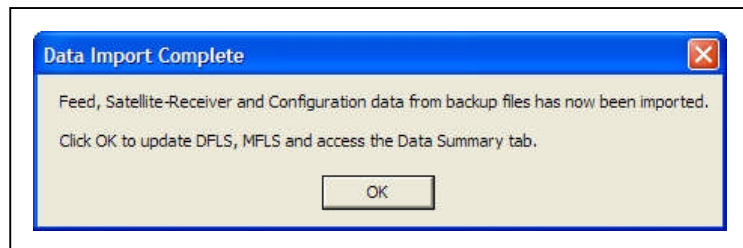
The **Delete All Data** button does just what it says – it deletes every bit of active data. It is intended for such purposes as quick removal of demo data or a fast way to offload unwanted user data in order to start fresh with a clean slate. Data deleted by this button is irrevocably lost and, for this reason, a series of confirmations are required from the user in order to activate this feature.

The following message boxes are displayed during the Delete All Data process.

The user is asked twice – once to confirm and a second time to re-confirm – the decision to delete all data. (If NO is selected on either occasion, a message will display confirming the delete all process abort.)
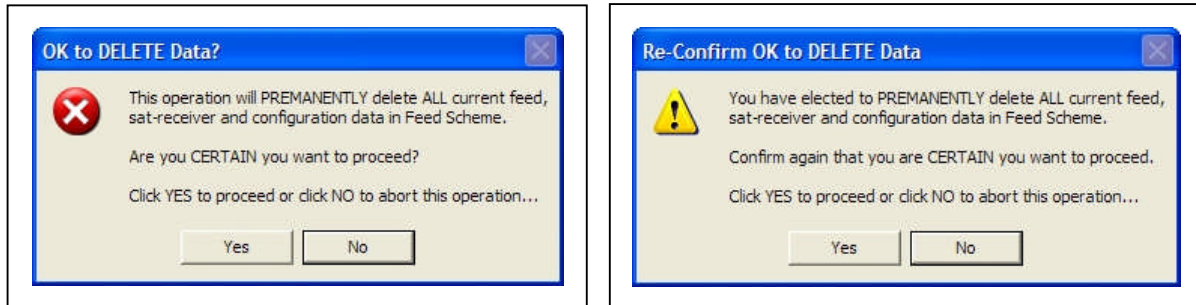
If YES is selected in either of the two previous messages, the delete procedure begins. The process selects each tab as its data is removed. A confirmation message is displayed following each data offload requiring the user to click OK to proceed to the next.

The final message confirms deletion of all three data groups. A click on its OK button exits the process on the Configuration tab.
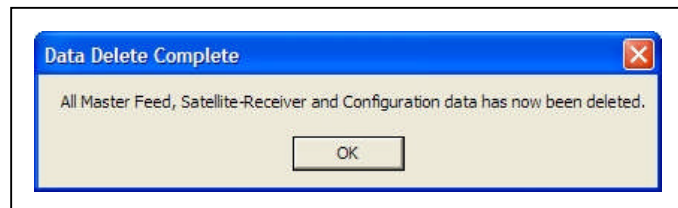
Save Changes

Changes made to *Feed Scheme* data are saved using Excel save icons, menus or shortcut keys (e.g. Ctrl+S). Changes are saved to *Feed Scheme's* original filename *Feed Scheme.xls*. Whenever a new save occurs, *Feed Scheme* creates a backup of the previous file's contents using the filename *Backup of Feed Scheme.xlk*.

Exit

Exit *Feed Scheme* using Excel menus or the Close X box in Excel's upper right corner or Alt+F4.

Note If no changes were made – and even if *Feed Scheme* was opened in Read Only mode – exiting the database will prompt an Excel message asking if the user wants to save changes made to *Feed Scheme.xls*. Even in the absence of changes, this save changes message will appear because, when *Feed Scheme* opens, it automatically sets the **Target Date** on the *Daily Feed List Sort* tab to the current system date. Users who have made no changes to *Feed Scheme* simply answer **NO** to the *save changes message* as another new system date will be automatically set for the *Target Date* at the next opening of *Feed Scheme*.

Uninstall

Feed Scheme may be uninstalled via either the **Programs** folder or **Add/Remove Programs**. The uninstaller removes all files and artifacts except the five backup files described in *Export Backup Data*.

Help and Support

As described in its **End User License Agreement**, *Feed Scheme* does not provide users with a dedicated Technical Support apparatus. While every effort has been made to assure the product's reliability when used on the platforms described in **Minimum System Requirements**, we recognize that, being software, *Feed Scheme* is subject to all the same vulnerabilities as any other creation that must rely on the configuration and integrity of each individual user's operational environment. Because we want its owners to have the best possible experience with *Feed Scheme*, we encourage users who encounter problems with the product to contact us. We will analyze each reported problem and determine its appropriate solution. Solutions offered may be either free of charge or fee based. For example, if the problem is judged to lie wholly within the structure (including code, formulas, etc) of our software product, a solution may be offered that is free of charge. If the problem is judged to have its focus in the user's operational environment, a fee based solution may be offered. If a mutually acceptable solution to a reported problem cannot be achieved, the user's purchase price will be refunded upon receipt of satisfactory proof of purchase.

Contacts

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By The Numbers

Though by no means intended as an exhaustive review describing *Feed Scheme's* totality, a *by the numbers* tally of the product would include the following:

1970	Earliest permissible user-defined year during data entry
1024 x 768	Pixels in native (recommended) screen resolution
200	Maximum number of feed events in the pending data area
175	Maximum number of feed events in the active database
119	Maximum number of feed events in the obsolete data area
47	Number of pre-highlighted rows available for data entry in the Satellite-Receiver List tab
26	Number of available and filterable properties per feed event
21	Number of devices monitored by Conflict Detection
14	Number of user-definable filter criteria Feed Source options supported
13	Number of parameters monitored on the Data Summary tab
10	Number of user-definable Receiver/Source devices supported
9	Number of monitored parameters with warning highlights on the Data summary tab
9	Number of available and filterable properties per Satellite-Receiver entry
7	Number of Worksheet tabs in the utility
7	Number of warning highlights for monitored parameters on the Daily Feed List Sort tab
6	Maximum number of characters in a user-definable distribution Channel (e.g. MYKDMO, WDMO12, etc)
6	Number of user-definable Recorder/Destination devices supported
5	Number of user-definable Dish Antenna devices supported

5	Required number of characters in a user-definable Source or Destination prefix mnemonic (e.g. VR1-1, SVR-2, DVR-3, etc)
4	Minimum number of characters in a user-definable distribution Channel (e.g. WAAA, K123, etc)
4	Number of user-definable Data Filter criteria on Daily Feed List Sort tab
4	Number of data Export, Load or Delete functions supported on the Configuration tab
3	Number of distribution Channels or Channel combinations highlighted on the Daily Feed List Sort tab
2	Required number of characters in a user-definable Dish Antenna suffix mnemonic (e.g. D1, D2, A3, A4, etc)
2	Number of discrete distribution Channels supported

Case Study

Feed Scheme and the Galaxy 26 Failure

On Sunday, June 29, 2008, Galaxy 26 – a widely used satellite distribution source for numerous network and syndication entities (CBS, Fox, King World, Paramount, PMI, NBC Universal, etc) – suffered a solar panel failure in orbit and lost numerous transponders. Users of Galaxy 26 transponder space began to rapidly offload their feeds to other orbital resources in what became a torrent of short notice feed revisions. These revisions lasted well into the week of July 7th. Because many primary notices of revision were temporary and stop gap in nature, they were followed within several days to a week later by more permanent secondary notices – meaning the feed landscape was in a constant state of flux for nearly two weeks.

Feed Scheme – with its ability to easily and quickly mount what-if studies of local resource allocations – played a crucial role in reassigning assets to successfully weather this event without so much as a single missed feed. The documented events in a case study of *Feed Scheme's* use at one station during the Galaxy 26 incident follow.

Early on Monday morning June 30th, as first word of lost feeds and refeeds began to surface, *Feed Scheme's* MFLS tab was utilized to identify all Galaxy 26 feeds at risk for the next two weeks. Of some 572 feeds in the two week period, roughly half (270) were on Galaxy 26. A day-by-day list of program distributors with Galaxy 26 feeds was printed from filtered MFLS data and used as a check-off against receipt of each program distributor's feed revision notices.

By mid morning on June 30th, data from *Feed Scheme's* SRL had been utilized to study the most efficient reallocation of dish antenna and receiver resources to handle the stream of new feed coordinates being received from program distributors. Antennas that required realignment to other satellite assets and receivers that must be reassigned to other antennas were identified and preparations made to undertake the required physical and electrical changes.

By mid day on Monday, same-day and next-day revised feeds had been input to *Feed Scheme's* MFL data. Existing Galaxy 26 data for at risk feeds served as the template for building new MFL feed data using simple copy and paste techniques. Once pasted, each new feed data row was revised to reflect altered times, days and orbital coordinates for the replacement feed while existing – and now obsolete – Galaxy 26 data rows had their primary feed days Xed out of MFL data so as to make them transparent during resource allocation analysis. Multiple what-if simulations were run on *Feed Scheme's* DFLS to assess same-day and next-day consequences of the new feeds. When new feeds caused device conflicts to be flagged on DFLS, alternate new and/or existing feeds were enabled using 1st Refeed and 2nd Refeed options in MFL data and the simulations re-run on DFLS until a conflict free feed scheme had been obtained. Obsolete Galaxy 26 data rows were removed from MFL's Active Data area and placed in Obsolete Data for future reference and safekeeping.

Once a no-conflict schedule had been formulated and demonstrated in *Feed Scheme*, only then were record orders for the *on-line feed scheduler* updated to reflect new feed events.

This process was repeated each day during the nearly two weeks that elapsed between receipt of the first Galaxy 26 related feed revision of early Monday June 30th and the last revision received from

distributors on Thursday July 10th.

Bottom Line: *Feed Scheme* easily ran between 5 and 10 what-if simulations in the time it would take to run a *single* simulation in the well known *on-line* scheduler deployed during this case study. *Feed Scheme* provided the ability to project feed schedules two weeks (or more) into the future while the on-line scheduler was limited to, at best, only a seven day look ahead. *Feed Scheme* made available the data necessary to determine the most efficient physical and electrical reallocation of dish antenna and receiver resources during this event. Due in no small measure to *Feed Scheme*, of 270 feeds at risk during the two week period of the Galaxy 26 failure in this case study, not a single feed was lost for broadcast.